

Product datasheet for **RC231507**

Guanylate kinase (GUK1) (NM_001242840) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Guanylate kinase (GUK1) (NM_001242840) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GUK1
Synonyms:	GMK
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC231507 representing NM_001242840 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGCC**

ATGCTGCGGGCCCGCTGGCCGGGCTGGCTGCGGCCGCCCTGGCCGGGCCCCACCGACGGCATGTCCG
GCCCCAGGCTGTGGTGTGAGCGGGCCTTCGGGAGCTGGGAAGAGCACCCCTGCTGAAGAGGCTGCTCCA
GGAGCACAGCGGCATCTTTGGCTTCAGCGTGTCCCATACCACGAGGAACCCGAGGCCCGGCGAGGAGAAC
GGCAAAGATTACTACTTTGTAACCAAGGAGGTGATGCAGCGTGACATAGCAGCCGGCGACTTCATCGAGC
ATGCCGAGTTCTCGGGGAACCTGTATGGCACGAGCAAGGTGGCGGTGCAGGCCGTGCAGGCCATGAACCG
CATCTGTGTGCTGGACGTGGACCTGCAGGGTGTGCGGAACATCAAGGCCACCGATCTGCGGCCATCTAC
ATCTCTGTGCAGCCGCCTTCACTGCACGTGCTGGAGCAGCGGCTGCGGCAGCGCAACTGAAACCGAGG
AGAGCCTGGTGAAGCGGCTGGCTGCTGCCAGGCCGACATGGAGAGCAGAAATCAAGAAAGCTCAAAGGA
CCGGCGCCTGAGGCTTGTGTCTGTTCTCGGCACCCCGGGCCCATACAGGACCAGGGCAGCAGCATTGAG
CCACCCCTTGGCAGGCATACGGCAGCTCTGTGCCCTTGCCAGCATGTGGAGTGGAGGAGATGCTGCC
CCTGTGGTTGGAACATCCTGGG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTAA



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Protein Sequence: >RC231507 representing NM_001242840
Red=Cloning site Green=Tags(s)

MLRRPLAGLAAAALGRAPPDGMGSRPVPVLSGSPGAGKSTLLKRLLEHSGIFGFVSHTTRNPRPGEEN
 GKDYFFVTREVMQRDIAAGDFIEHAEFSGNLYGTSKVAVQAVQAMNRCVLDVDLQGVNRNIKATDLRPIY
 ISVQPPSLHVLEQRLRQRNTEETESLVKRLAAAQADMESRNQESSKDRRLRLAVCSRHPGPIQDQGSIE
 PPPWQAIRQLCALGQHVWRRCCPCGWNILG

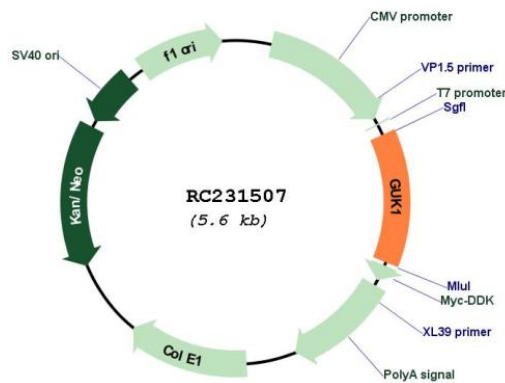
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001242840
ORF Size: 723 bp

OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
Reconstitution Method:	<ol style="list-style-type: none">1. Centrifuge at 5,000xg for 5min.2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.3. Close the tube and incubate for 10 minutes at room temperature.4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	NM_001242840.2
RefSeq Size:	904 bp
RefSeq ORF:	726 bp
Locus ID:	2987
UniProt ID:	Q16774
Cytogenetics:	1q42.13
Protein Families:	Druggable Genome
Protein Pathways:	Metabolic pathways, Purine metabolism
MW:	27 kDa
Gene Summary:	The protein encoded by this gene is an enzyme that catalyzes the transfer of a phosphate group from ATP to guanosine monophosphate (GMP) to form guanosine diphosphate (GDP). The encoded protein is thought to be a good target for cancer chemotherapy. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jun 2011]